

What is claimed is:

1. An annuloplasty device for an annulus of a mitral valve, comprising:

a structural component sized for the annulus of the mitral valve, said structural component having a generally C-shaped posterior portion including a central portion and first and second lateral portions; and

a relatively softer outer layer overlying said structural component, said outer layer including means for identifying sets of suturing locations through said outer layer, each said set corresponding to a discrete predetermined amount of cinching of the annulus.

2. An annuloplasty device according to claim 1, wherein:

said means for identifying includes visual indicia.

3. An annuloplasty device according to claim 2, wherein:

said visual indicia includes sets of visual indicia distinguished by at least one of color and shape.

4. An annuloplasty device according to claim 1, wherein:

said means for identifying includes discrete indicia corresponding to each of said sets of suturing locations, and said indicia corresponding to each of said sets are spaced apart from each other by a distance different than a distance by which indicia in the other of said sets is spaced apart.

5. An annuloplasty device according to claim 1, wherein:

said first and second lateral portions each include one of a trigone marking and a commissure marking adjacent an end opposite said central portion.

6. An annuloplasty device according to claim 1, wherein:

said structural component further includes an anterior portion anteriorly coupling said first and second lateral portions, such that said device is ring-shape.

7. An annuloplasty device according to claim 1, wherein:

said central and first and second lateral portions define a plane, and said first and second lateral portions are relatively stiffer than said central portion in a direction transverse to said plane.

8. An annuloplasty device for an annulus of a mitral valve, comprising:

a structural component sized for placement about the annulus of the mitral valve, said structural component having a generally C-shaped portion including a central portion and first and second lateral portions, said central portion having a different cross-sectional shape from said lateral portions.

9. An annuloplasty device according to claim 8, wherein:

said central portion has a rounder cross-sectional shape than said lateral portions.

10. An annuloplasty device according to claim 8, wherein:

said lateral portions are stiffer than said central portion.

11. An annuloplasty device according to claim 8, wherein:

said structural component is annular.

12. An annuloplasty device according to claim 8, wherein:

said C-shaped portion is located at a posterior portion of said structural component and defines a first curve, and said structural component includes an anterior portion which defines a second shallow curve.

13. An annuloplasty device for repair of a mitral valve after heart failure, comprising:

an annuloplasty ring having a posterior portion P with a central portion P_2 , and lateral portions P_1 and P_3 , wherein said central portion P_2 is provided with at most a single set of indicia corresponding to suture locations, and said lateral portions P_1 and P_3 each include multiple sets of discrete indicia corresponding to different suture locations, wherein said indicia corresponding to each of said sets of indicia on P_1 and P_3 are spaced apart from each other by a distance different than a distance by which indicia in the other of said sets of indicia on P_1 and P_3 is spaced apart.

14. An annuloplasty ring according to claim 13, wherein:

said ring is C-shaped.

15. An annuloplasty device for repair of a mitral valve after heart failure, comprising:

an annuloplasty ring having a posterior portion P with a central portion P₂, and lateral portions P₁ and P₃, and an anterior portion A,

wherein said anterior portion A is provided with at most a single set of indicia corresponding to suture locations, and said lateral portions P₁ and P₃ each include multiple sets of discrete indicia corresponding to different suture locations, wherein said indicia corresponding to each of said sets of indicia on P₁ and P₃ are spaced apart from each other by a distance different than a distance by which indicia in the other of said sets of indicia on P₁ and P₃ is spaced apart.

16. An annuloplasty instrument system for implanting an annuloplasty ring, comprising:

- a) a handle having first and second ends; and
- b) an annuloplasty ring holder coupled to said first end, said ring holder adapted to be coupled to an annuloplasty ring, and said ring holder including anterior and posterior portions, said posterior portion including a central P₂ portion and relatively lateral P₁ and P₃

portions, wherein said P₁ and P₃ portions of said holder each include multiple sets of discrete suture guides.

17. An annuloplasty instrument system according to claim 16, wherein:

said central P₃ portion of said holder includes at most a single set of discrete suture guides.

18. An annuloplasty instrument system according to claim 16, wherein:

said anterior portion of said holder includes at most a single set of discrete suture guides.

19. An annuloplasty instrument system according to claim 16, further comprising:

c) an annuloplasty ring removably coupled to said implant holder of said instrument.